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ABSTRACT

Descriptions of vocational, practical arts, and general adult education programs for an exemplary school curriculum, grades K-12 in Leflore County, Mississippi, are given in this 1969 document. Suggestions include development of an area vocational-technical school designed to supply partially the anticipated manpower needs of this rural county. It is noted that student needs will be met through (1) vocational areas which will include occupational training in agriculture, business, industry, homemaking, and health occupations; (2) practical arts areas which will provide general education exploratory opportunities and home-use competencies in homemaking, industrial arts, agriculture, and business; and (3) general adult education which will provide basic elementary education and courses for high school credit, for general interest, and for civil defense emergencies. This work was prepared under a Title III contract of the Elementary and Secondary Education Act. [Not available in hard copy due to marginal legibility of original document.] (AN)

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Leflore County School District
Mississippi

Reports of Consultants
and Advisory Specialists
under
Planning Grant, Title III,
Elementary and Secondary
Education Act of 1965

Project No. 67-04725-0

# Volume X - A
# Industrial and Practical Arts, Vocational Education, and General Adult Education

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## SUMMARY

1. The exemplary program of vocational, practical arts and general adult education for the Leflore County Mississippi School District will include instruction in the practical arts in the nine schools presently in operation, and vocational-technical and general adult education in a proposed area vocational-technical school for the youth and adults of the county.

2. The vocational areas will provide competencies for students and adults interested in preemployment and upgrading for courses in (1) agriculture including farming and related occupations; (2) business including distribution and office occupations; (3) industry; (4) homemaking occupations for gainful employment; (5) selected health occupations and (6) special instruction for disadvantaged youth.

3. The practical arts area will provide general education, exploratory opportunities and home use competencies in homemaking; and in industrial arts, including skills and industrial technology; and in agriculture and business.

4. The general adult education area will provide competencies in basis elementary education; and courses designed for high school credit, general interest, and civil defense emergencies.

5. The curriculums will consist of units of instruction selected to meet the general and vocational needs of each student. This procedure will be effected by the organization of subject matter and skills into three, six, nine and eighteen week units with modular scheduling to permit crossovers and team teaching.

6. Students will be permitted to progress in so far as is possible according to their individual abilities; and method and content will be adapted to gifted, normal and less gifted students.

7. A teacher-adviser will be provided for each student to assist the student in selecting units of instruction, preparing schedules, and planning individualized instruction procedures. Each teacher-adviser will have responsibility for 25 or 30 students, and students will remain with the same adviser throughout the three year senior high school program. The adviser will assist in selecting both academic and vocational units leading to the high school diploma.

8. Provision will be made for on-the-job instruction for selected students who need and can profit from such instruction.

9. Teaching aids will be used in classrooms, and in carrels for individualized instruction. These facilities will be wired for closed circuit television and other audio-visual aids. A teaching materials laboratory for constructing and distributing aids for teaching purposes will be maintained.

10. Preschool conferences for teacher planning and daily conferences for discussing pupil progress and arranging for individual needs and the use of teaching aids will be conducted.

11. A continuous program of evaluation to determine the efficiency of the total program will be activated.

12. The personnel will include a director of the area school, a supervisor of practical arts for the other schools, a supervisor for the MDTA program, and such other qualified personnel as are needed for an exemplary program.

# THE DEVELOPMENT OF AN EXEMPLARY PROGRAM IN VOCATIONAL, PRACTICAL ARTS AND GENERAL ADULT EDUCATION FOR THE LEFLORE COUNTY MISSISSIPPI SCHOOL DISTRICT.

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## INTRODUCTION

This report contains a description of a vocational, practical arts and general adult education program for an exemplary school curriculum, grades kindergarten through twelve in the Leflore County Mississippi School District. The suggestions include the development of an area vocational-technical school in which some courses will be offered on the post high school level. This program is designed in part to supply the anticipated manpower needs of the next decade and the present day needs of the youth and adults of the county.

The proposed program is for all students and adults of the county district. It is not a program for a special group of students and adults, but opportunities are offered that should challenge the superior students as well as the average, below average, and disadvantaged in the school population. These suggestions are presented in response to a request from the Leflore County school authority. The suggestions are presented not only for effecting an improvement in the educational opportunities of the County District but also for improving the economy of the school community and surrounding area.

## THE ECONOMY OF LEFLORE COUNTY MISSISSIPPI

A vocational, practical arts and general adult education program is conditioned in part by the economy of the school service area. Recent studies and observations have shown that a large number of high school graduates and drop-outs seek employment in business and industry located in and near the

communities in which the students attended school. This, together with the fact that financial support for the schools is based in part on community resources and attitudes, requires that the economy and resources of the school community be considered in planning any school program in vocational, practical arts and general adult education.

Leflore County Mississippi has two local school districts. One of these is the Greenwood City School District occupying an area of about 5 square miles with an enrollment of about 6,200 students. The other district is referred to as the Leflore County school district with an area of 583 square miles and a school enrollment of 6,440 students. The Mississippi Valley State College with an enrollment of 2,500 students is located in the county. This report is concerned with the Leflore County school district.

The population of Leflore County has declined since 1930. This decline has been in the rural areas. The city of Greenwood experienced a growth of 56 per cent from 1940 to 1965. The labor force was estimated at about 16,000 persons in 1960 which represented a decline of 12 per cent since 1950. About one-third of the labor force was employed in agriculture in 1960 - a decline of 42 per cent since 1950. (Table 1) Non-Agricultural employment has shown steady gains and the labor force has been meeting existing demands.

Leflore County has about 166,000 acres of forest land and some industries using forest products are located in the county. Other industries include those engaged in printing and publishing, in the manufacturer of cotton seed products, fertilizers, insecticides, farm implements, concrete and asphalt, pianos, fishing tackle, zippers, picture frames, truck bodies, testing equipment, monuments, sheet metal and machine shop products, and others.

The principal cash crop is cotton. Other agricultural products include soybeans, oats, wheat, rice, corn, and livestock. The value of all agricultural products sold was more than $27,000,000 in 1964, an increase of 15 percent

TABLE 1. CHANGES IN THE LABOR FORCE OF LEFLORE COUNTY MISSISSIPPI APRIL 1960

| Classification | Number in 1960 | Per cent change 1950 to 1960 |
|---|---|---|
| Agricultural | 4816 | minus 41.7 |
| Private wage and salary | 3899 | |
| Self employed | 869 | |
| Unpaid family | 43 | |
| Nonagricultural | 10,671 | plus 7 |
| Professional, technical and kindred | 1086 | plus 23.7 |
| Managers and officials except farm | 1155 | plus 2 |
| Clerical and sales workers | 2049 | plus 0.7 |
| Craftsmen, foremen and kindred | 1259 | minus 0.6 |
| Operatives and kindred | 1339 | minus 11 |
| Private household | 1536 | plus 21.9 |
| Service except private household | 1261 | plus 38.3 |
| Laborers except farm and mine | 698 | minus 13 |
| Occupations not reported | 288 | plus 66.5 |
| Unemployment | 1156 | plus 10.5 |

Source: Leflore County Area Development Committee, Leflore County Development Plan (OEDP), Greenwood, Mississippi, 1967

since 1959. The average size of the farms increased from 56 acres in 1950 to 360 acres in 1964 with a corresonding reduction in the number of farms.

The Yazoo, a tributary of the Mississippi River which flows 165 miles from Greenwood to the Mississippi River at Vicksburg is an important potential resource of Leflore County. The U. S. Corps of Engineers has estimated that the Yazoo River could, with a comparatively small expenditure, provide year round navigation from Greenwood to the Mississippi River. This waters transportation would be an important factor in attracting heavy industry to the county.

THE LEFLORE COUNTY DISTRICT SCHOOLS

The Leflore County District has two high schools and seven elementary and junior high schools. (Table 2) The total enrollment in the schools has increased about 350 students but the average daily attendance has decreased by about 240 students during the three year period 1965-66 to 1967-68.

Practical arts, vocational education and general adult education are relatively new subjects in most schools of the county. The Amanda Elzy High School offers practical arts in industrial arts, home economics and business education in the high school grades. These subjects have a total enrollment of about 600 students. Vocational courses in carpentry, off-set printing, masonry and shoe repair enroll about 100 students. Leflore County High School has 47 students in vocational agriculture, 32 in mechanical drawing and 85 in business education. The junior high schools, T.Y. Fleming, Sam Balkin, R. B. Schlater and Wilkes offer industrial arts general shop in grades seven, eight and nine. There are no general adult education classes offered.

Leflore County School District is maintaining a Manpower Development and Training Program in a separate school facility in which courses in clerk-stenography, upholstery, welding, machine shop, auto-mechanics with adult

TABLE 2. LOCATION ENROLLMENT GRADES TAUGHT AND NUMBER OF CLASSROOMS IN SCHOOLS OF THE LEFLORE COUNTY SCHOOL DISTRICT, 1967-68

| Name of school | Location | Enrollment | Grades taught | Classrooms |
|---|---|---|---|---|
| Amanda Elzy | Greenwood | 1,962 | 1 - 12 | 64 |
| East | Greenwood | 236 | 1 - 8 | 13 |
| T. Y. Fleming | Minter City | 695 | 1 - 9 | 22* |
| Sam Balkin | Schlater | 554 | 1 - 9 | 20 |
| Leflore County High | Itta Bena | 747 | 1 - 12 | 28 |
| L. S. Rogers (Lab.) | Itta Bena | 707 | 1 - 6 | 27 |
| R. B. Schlater | Morgan City | 714 | 1 - 9 | 27 |
| Sunnyside | Sunnyside | 222 | 1 - 8 | 11 |
| Wilkes | Money | 612 | 1 - 9 | 22 |

* Under construction - ready September 1969

Source: Leflore County Schools, Office of the superintendent

basic education offered in all courses. Some 274 persons have completed the courses but the supervisor has experienced some difficulty in placing students in some occupations.

By way of summary, it may be stated that progress in vocational and practical arts education is being made in the Leflore County School District but much yet remains to be done especially in curriculums, course content, facilities and equipment. A pilot program in elementary industrial arts is in the planning stage and this should result in much improvement in industrial arts offerings.

## THE PRACTICAL ARTS

It is suggested that a complete program of practical arts be offered in each grade of each of the schools in the Leflore County District. The areas of practical arts that should be included are (1) agriculture and forestry, (2) homemaking, (3) industrial arts, (4) health occupations, (5) business occupations and (6) distributive occupations. (Figure 1) The content of the areas will vary with the grade level and student interest.

The practical arts are not designed to prepare persons for the specific occupations involved but are designed to provide general education in the problems and processes involved in each area, to assist in acquiring some skills and information needed in the home, and to gain an appreciation of the problems of business and industry in their relations to the home and to the nation's economy. They have some exploratory value in assisting the student to make an occupational choice.

### GENERAL CHARACTERISTICS.

Practical arts in the Leflore County School District will be characterized by:

AGRICULTURE AND FORESTRY

General knowledge and skill in plant and animal science, including crops and livestock, horticulture, floriculture, landscaping farm management, agri-business, and agricultural mechanics. The manufacture and conservation of forest products

HOMEMAKING

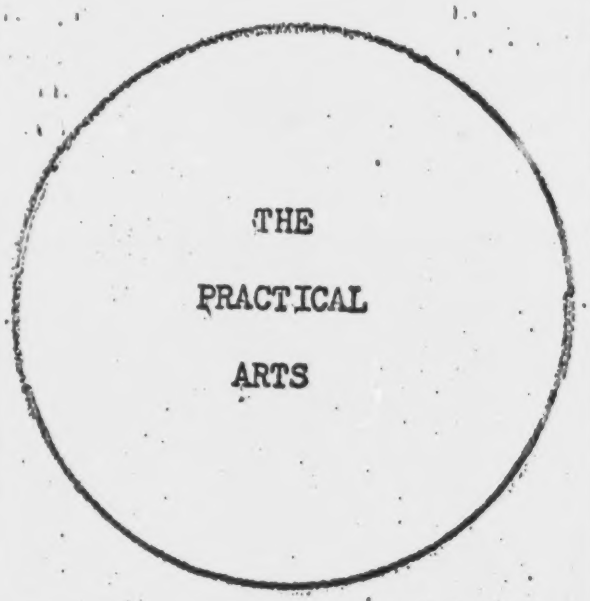
General knowledge and skills in homemaking activities concerned with food and nutrition, clothing and textiles, human development and the family, housing, home management and family economics

INDUSTRIAL ARTS

General knowledge and skills in the following areas of industry:

manufacturing
construction
communications
transportation
mining
power

Emphasis will be placed on modern products and processes




HEALTH OCCUPATIONS

General information and skills concerned with:

home sanitation
emergency care
terminology
medical ethics
hygiene
the prevention of illness

BUSINESS

General knowledge and information about business principles and practices, home accounting, record keeping, interpreting records, typing for home and personal use, and consumer education

DISTRIBUTION

General knowledge and skills about wholesale and retail sales, and services, installment buying, selecting for quality and durability, store services, delivery and credit costs, and attitudes towards sales persons and other store personnel

FIGURE 1. A GRAPHIC ILLUSTRATION OF THE PRACTICAL ARTS

(1) The placing of more emphasis on an understanding of business, industry, agriculture, distribution, health and homemaking. This emphasis will begin early in the school curriculum.

(2) The usual fixed time allotments, course sequence and prerequisites will not be observed but these factors will be governed by the interests, abilities and needs of students.

(3) The content of practical arts will relate to present day problems and processes including automation, computers, space vehicles, fluid power, agricultural chemicals, health, home and family life, distribution problems and the economics of business.

(4) The learning activities will be concerned with knowledge, skills and attitudes in the use of the products and processes of the practical arts areas and their effect on manpower and its alternate uses.

(5) Students will be permitted to cross over into areas other than those included in their curriculum as the need arises. This will be facilitated by short unit courses rather than yearly sequences.

(6) Methods of instruction will include individualized as well as group instruction, audio visual aids, models, mock ups, video tapes, recordings, teaching systems and team teaching.

(7) Carrels will be included in the classrooms and laboratories to encourage individual effort. The carrels will have electrical outlets for projectors, recorders and other types of audio visual aids.

(8) Instructors will serve as counselors to 25 or 30 students and follow these students through their years of schooling. This is not designed to replace but to supplement the regular counseling program.

THE COURSE CONTENT.

The course content of the practical arts program in grades kindergarten through six will be derived from the subject matter of the units of instruction. No fixed schedule of practical arts will be observed but study and skill will become a part of the sequence of the units of instruction. For example, in a unit on communications, students in the kindergarten examine photographs of telephone, radio, television and record player. The, draw and color these items, past pictures and observe traffic lights. (Figure 2) Activities for the other grades vary with the grade level. The K-6 groups will use the home room one corner of which is equipped with tool racks and cabinets, work tables, saw horses and supplies. Arrangements may be made for some students in the upper grades to use the junior high practical arts laboratory.

The course content in the junior high school - grades seven, eight and nine - will be more formalized and will include units of work in the various areas. The practical arts activities will include industrial arts in the industrial arts laboratory for grades seven, eight and nine. The areas of industrial arts will consist of the following courses for the grades indicated:

| Grade Level Seven | Grade Level Eight | Grade Level Nine |
|---|---|---|
| Art Metal | Bench Metal | Elementary Electricity |
| Ceramics | Drawing | Machine Shop |
| Leather | Sheet Metal | Power Mechanics |
| Plastics | Woodwork | Welding |

The courses will be arranged in units of six to nine weeks each and students who are proficient may omit a unit or complete the unit in less than the alloted time. The specific content will vary with the students interest and abilities.

Practical arts in the senior high school will include business education courses in typewriting and bookkeeping for home use. These courses will be

KINDERGARTEN
(Home room)

Examine photographs of telephones, radio, television and record players. Mail cards and letters. Visit post office and telegraph office. Draw and color some of the above. Paste pictures of communications devices in scrap book. Observe traffic lights and rules. Collect stamps. Examine newspapers. Appear in broadcast skits.

GRADES 1 - 3
(Home room)

Write letters. Learn to use the telephone. Use tape recorders. Listen to talking books. Install telephone lines with string. Estimate length of the lines. Construct chart stands. Learn how to signal with flags. Study the sign language. Construct bulletin boards. Use the typewriter. Read about various communications devices.

A

COMMUNICATIONS

UNIT

GRADES 7 - 9
(Industrial arts laboratory)

Use kits to construct radio and television sets. Make stage props for school play. Make drawing boards and stands. Design color telephones and TVs. Cut stencils and use duplicators. Bind books. Make silk screens. Read about early communication devices. Read about printing, book binding and photography. Study teletypes, computers and satellites. Study the United States mail service

GRADES 4 - 6
(Home room and industrial arts laboratory)

Design book covers. Write letters for materials. Give oral reports. Compile school newspaper. Make filing box. Construct crystal radio sets. Take photographs. Operate film and slide projectors. Estimate lengths and learn about various measuring devices. Make block and linoleum prints. Learn to use adding machine. Read about communications.

FIGURE 2. SOME SUGGESTED MANUAL AND READING ACTIVITIES FOR A UNIT ON COMMUNICATIONS

arranged in units of one semester. Homemaking courses will be offered at the senior high school level. In addition to the semester units previously mentioned, a series of nine-week units will be offered to permit students from other areas to cross over and secure homemaking skills. These units will also be available for homemaking students. Units in this category include grooming, clothing selection, family living, house planning, and foods.

Industrial arts at the senior high school level will consist of (1) opportunities for additional knowledge and skills in the areas previously mentioned, and (2) an industrial technology course. This industrial technology course will involve instruction and demonstrations in unit courses of nine weeks each. Courses suggested for this area include electronics and computer technology, power mechanics including space age technology, principles of mechanics and fluid power. Students will be permitted to elect one or more units without reference to sequence.

DEVELOPMENTAL COURSES

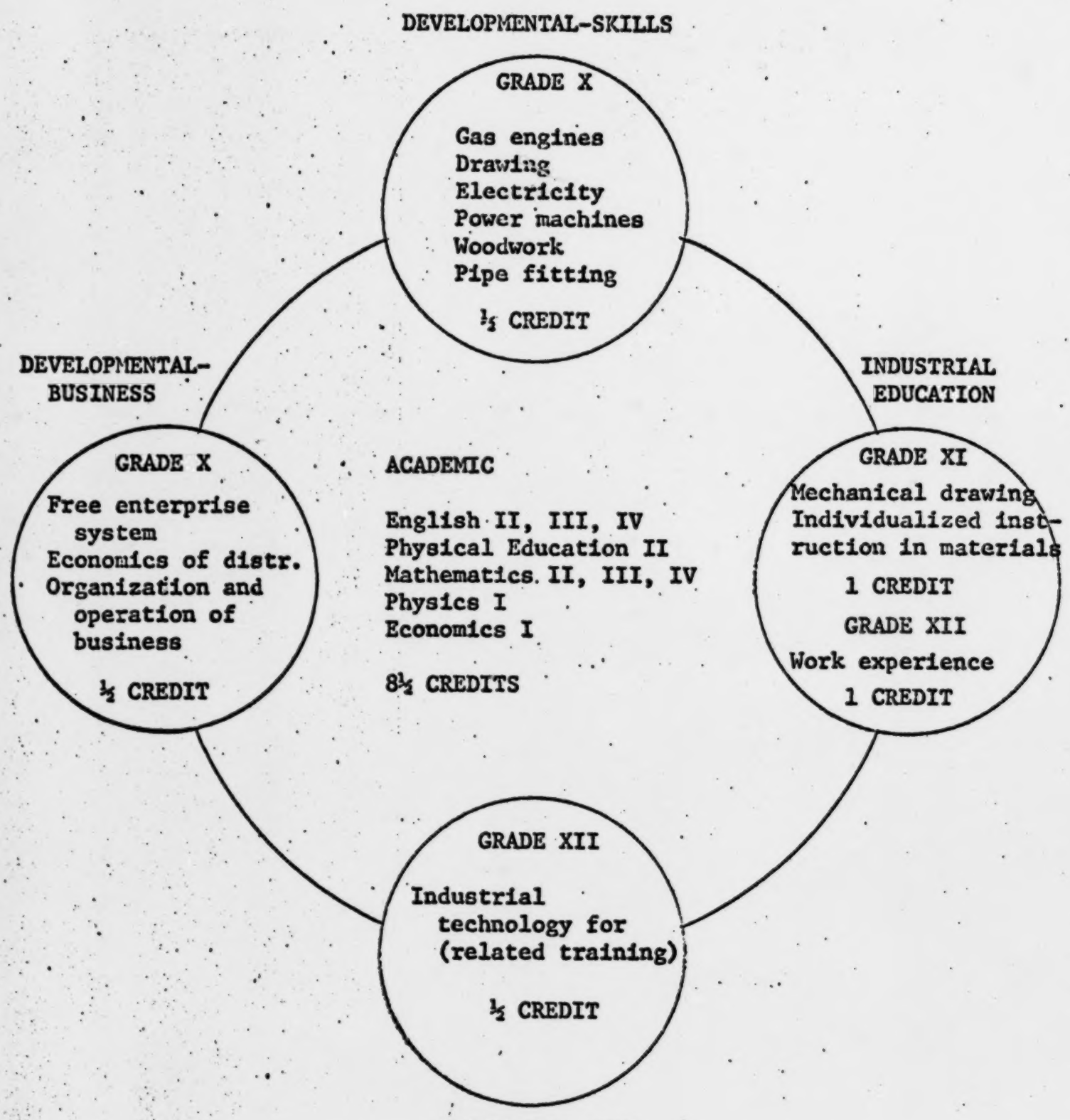
It is suggested that two or three developmental courses be offered for students who have no occupational goal to assist them in occupational planning. One of these, Developmental-Mechanical Skills, is designed for students who may desire to continue in either vocational agriculture or some industrial curriculum. The course will consist of twelve three-weeks courses in basic mechanical skill such as cold metal, pipe fitting, tool sharpening, painting and others. Students who have previously attained proficiency in one unit may omit and, if desirable, spend additional time on other units.

A course, Developmental-Business and Distributive, will consist of units such as (1) the free enterprise system, (2) the economics of distribution, (3) the organization of business establishments, (4) personal characteristics, (5) housekeeping in business, and (6) job analyses and descriptions. Each

unit will be scheduled for a six-weeks period and students may omit some or spend additional time in others. A developmental course designed for students who may be interested in either home economics or health occupations patterned somewhat after the above may also be included if the need arises.

SCHEDULING

It will be noted that most courses in the junior and senior high schools are in units of three, six, and nine and eighteen weeks. This arrangement is to permit flexibility in scheduling and to meet the needs of individual students. This is a modification of modular scheduling and may lead to this type of scheduling. The use of unit courses as suggested will add to the difficulty of scheduling and will require a constant check on class size to prevent large classes. Some students may be required to change classes or to work individually on some units. Students will not be permitted to enter a class except at the time the unit is scheduled to begin. They may, however, leave the class before it is scheduled to close if the instructor is assured that the student has acquired proficiency in the unit. All teachers will need to assist in counseling students. An example of a three year program planned for a student who is planning for entry into an educational program leading to the occupation of mechanical draftsman is shown in the diagram on the following page.




**AN ANALYSIS OF A THREE-YEAR PROGRAM OF STUDIES LEADING TO THE HIGH SCHOOL DIPLOMA, AND PLANNED FOR A STUDENT WHO IS PREPARING FOR A CAREER AS A MECHANICAL DRAFTSMAN**

**This student will pursue studies in the following areas: Vocational Industrial Education, Developmental skills, Developmental-Business and Industrial arts. The industrial arts course will constitute related training for work experience. The student will receive a total of 3½ credits in the vocational areas. A total of 8½ credits will be selected from the academic fields to meet the needs of the student.**

FACILITIES FOR PRACTICAL ARTS

Grades kindergarten through six will utilize a corner of the home room for practical arts. This area will be equipped with a tool rack for appropriate hand tools, a work table with an attached vise, and two saw horses. Scissors, rules, paste and materials suitable for the grade level will be stored in appropriate cabinets. Portable tool carts will be provided for each school containing additional tools that may be needed for students in the upper elementary grades.

Practical arts in the areas of homemaking, health, agriculture, business and distribution will utilize the facilities of special rooms or the senior high school laboratories in these teaching areas.

An industrial arts laboratory will be provided in each of the junior high schools. This laboratory will consist of a shop area, classroom area separated from the shop by glass partitions, storage space, one or two offices, a wash room and preferably an instructor's shop. The building will contain four or five carrels for individual study. The facility will be provided with electrical outlets for power and for the use of audio visual equipment including outlets near the power machinery for recordings and video.

A separate industrial arts laboratory will be provided for the students at the high school level equipped similar to the above with space, outlets and arrangements for sophisticated equipment.

Safety precautions such as non-skid floor coverings, safe arrangement of power lines and equipment, special markings for danger areas, storage of all hand tools or portable equipment, adequate heat, light and ventilation and safe procedures in obtaining equipment and supplies will be observed.

Most of the junior and senior high schools, with perhaps the exception of Leflore County High School, will have adequate space for practical arts if all

vocational courses are provided for in the proposed new area vocational-technical school. Some modifications and additions will be needed to the practical arts laboratories, including abandoning the temporary metal building at Leflore County High School.

## ORGANIZATION

The success of the practical arts program will depend to a degree on its organization. A supervisor of industrial arts responsible to the central school authority will provide leadership for the program. He will also supervise the high school industrial arts program under the direction of the high school principals concerned. Two coordinators of industrial arts in grades K-6 will be employed to assist the teachers in selecting activities, and teaching children the proper use of hand tools. Qualified instructors and secretarial and clerical assistance will be provided. Records of enrollment and expenditures will be readily available to the supervisors.

The operation of the program requires planning and inservice education. An inservice education workshop of two or three weeks will be conducted prior to the beginning of the program to acquaint the teachers with the new philosophy involved and assist them with some of the procedures of scheduling, use of materials and plans for cross-overs and individualized study.

Faculty meetings of groups of teachers in each of the buildings will be needed from time to time. A special period of perhaps fifteen minutes will be sufficient if the meetings are carefully planned in advance and conducted with expediency. Such questions as extra time for individual students in specified classes, cross-overs, absenteeism, and attitudes may constitute the important items for these meetings.

## VOCATION AND TECHNICAL EDUCATION

The Leflore County School District as previously indicated is presently maintaining curriculums or courses in vocational education in the senior high schools. These courses differ from the practical arts courses in that they are designed to educate present and prospective workers for proficiency in a chosen occupation, The industrial courses occupy three periods daily and utilize productive type equipment. They are organized for persons who need, want and can profit from the instruction.

The present offerings in vocational education will be continued and expanded. An expansion in the economy will require workers with skills and knowledge other than those now being offered. The changes in the nature of industry will require that students who enter vocational curriculums have more academic education before entry into the education or training program.

## THE AREA VOCATIONAL-TECHNICAL SCHOOL

The expansion of the industrial arts program in the two high schools and the addition of new curriculums in vocational education will require more space for vocational and technical education. It is suggested that this additional need for space be met by the construction of an area vocational-technical school in Leflore County in which vocational and technical curriculums will be available for all youth and adults in the county. The building will be designed for the course offerings.

It is suggested that the area school provide for instruction in a variety of vocational and technical courses in the following vocational areas:

Agriculture:

Instruction in the agricultural area will include (1) plant and animal science scheduled for one semester each, (2) specialized courses of nine weeks

will be organized in the production of farm animals, poultry and products, field crops, horticulture, landscaping, greenhouse management, farm management, agri-business, and agricultural mechanics. (3) A supervised training program in agricultural experience (STAE) will be included. The specialized courses will produce opportunities for day school students and adults to elect courses when they need and in which they are interested. The STAE course is designed to provide opportunities for students to acquire knowledge in agriculture and related occupations in a work-study program. Some technical courses in testing, grading, insect, disease and weed control may be needed.

Business:

Courses in the business education area will include curriculums in: (1) clerk-stenography, (2) secretarial science, (3) accounting and (4) office practice. Most of these curriculums will require a prerequisite of high school graduation or the equivalent and will be available to youth and adults.

The specific courses will include (1) one or two years of typewriting, (2) a one year course in shorthand and secretarial practices, (3) a one or two year course in accounting, (4) a semester course in the use of office machines, (5) a clerical practice course of one year, (6) a socio-economics course of one year. The program will also provide for supervised experience in a business establishment for a semester or a year. Where feasible the courses will be divided into short units to permit students from other areas to cross-over for needed information.

Distributive Occupations:

The distributive occupations area is designed to educate persons for psositions in wholesale and retail selling and in service occupations. The course content will consist of six week units in each of the following: (1) Basis salesmanship, (2) store management, (3) the consumer and the products of distribution, (4) mathematics for salespersons, (5) communications, (6) security equipment for distribution establishments. Students will be permitted

to omit units in which they have secured proficiency in prior courses. Students in this curriculum may cross-over into other curriculums for needed competencies.

A cooperative work experience class will be included for selected students who desire and can profit from it. Agreements will be made with employers to employ students for half time during the school year. Students will be rotated among the various jobs in the establishments.

Health Occupations:

Curriculums designed to educate persons for positions as licensed practical nurse, nurse's aide, medical receptionist, hospital attendant and some types of technicians will be offered. The specific curriculums and content will be determined by an advisory committee of qualified persons from the community. A two course sequence will provide some of the basic information. One of these courses is an orientation course of two nine weeks units on (1) health - what it is and (2) what opportunities are available in health occupations. The medical receptionist course will consist of a series of six to nine weeks units such as medical terminology, some laboratory procedures, nursery procedures, medical ethics, typing, filing, office practice, grooming and personal hygiene. Students will be permitted to cross-over into other areas for some units, and some opportunities for experience or observation on the job will be provided.

Home Economics Occupations:

Home economics courses for gainful employment in such related occupations as child day care worker, hotel housekeeping, food service preparation for commercial eating establishments, homemaking assistant, and companion to elderly persons will be offered. The titles and number of these courses will be determined by the demand for the courses. Provision for students to obtain some work experience or observation will be provided.

TRADE-TECHNICAL OCCUPATIONS.

Curriculums or courses in trade-technical education will be offered in the following trades: (1) auto mechanics, (2) carpentry, (3) machine shop, (4) masonry, (5) sheet metal work, (6) shoe repair, (7) small gas engine repair, (8) upholstery, and (9) welding. Technical courses in which high school graduation or the equivalent is a prerequisite will be offered in (1) cosmetology, (2) electricity and electronics, (3) elementary operations of computers, (4) mechanical drawing, (5) printing, and (6) refrigeration and air conditioning technology. A course for semi-skilled workers for assembly lines will be offered. This course will include manual dexterity, use of hand tools, getting along with others and plant rules and regulations.

DISADVANTAGED YOUTH

Some youth with low intelligence quotients may be unable to compete in the labor market with normal youth. A special class will be offered for the disadvantaged. The class will consist of one-half day classroom work and one-half day job experience in business or industry. One class will be limited to 15 youth. The classroom work will consist of language arts, practical mathematics, social studies and leisure time activities. Individualized instructions with work books specially designed for these youth will be used. Students will be employed under special arrangements with employers for jobs as janitor's assistant, bus boy in a restaurant, maid's assistant, laundry workers, and such other jobs within the capability of the youth. These youth will receive some pay for their work.

ADULT EDUCATION

The area school will provide facilities for adult education in the various vocational fields in accordance with the needs and demands in these fields.

When the need arises related training for apprentices will be included in the program and the Manpower Development and Training Program will be continued.

A program of general adult education will be organized consisting of (1) adult basic education for adults 18 years of age or older who are in need of such competencies as reading, writing and arithmetic to enable them to train or retrain for an occupation, (2) high school credit courses for adults who desire to complete the requirements or equivalency for a high school diploma, (3) general interest non-credit courses for adults interested in broadening their educational background, and (4) civil defense courses for information concerning family care in an emergency.

ORGANIZATION

The success of the trade-technical program will depend on many factors including adequate facilities, personnel organization, inservice education and continuous evaluation. A comprehensive plan for each of these factors will be developed by the school authorities and the advisory committee. A few suggestions are included below:

The extent and nature of the facilities needed will depend on the kinds of program to be housed in the facilities. Items such as a teaching materials laboratory, storage space, office space, classroom space, auxiliary rooms, wiring for audio visual aids, heat, light, and ventilation should not be overlooked.

The personnel will also depend upon the offerings but will include a director, assistant director, a vocational counselor, a supervisor of the MDTA program, a coordinator of general adult education, a supervisor of the teaching materials laboratory, a coordinator of public information and qualified teachers and assistants.

The inservice education program will be designed to acquaint teachers with the principles and procedures of curriculums arranged to meet the needs of individual students. The in-service activities will include (1) a preschool conference of two to four weeks and (2) an individual plan and procedure for the improvement of instruction. Each of these activities will be planned by cooperative arrangements far in advance. Evaluative techniques and procedures will be developed during the preschool conference. These procedures will be designed for a continuing evaluation of the vocational-technical programs.

## CONCLUDING STATEMENT

This report contains suggestions for an exemplary program in vocational, practical arts and general adult education for the Leflore County Mississippi School District. It is recognized that this program cannot be placed into operation in one or two years, and also that it may not be feasible at any time to organize parts of the program. However, the problems and resources of the community show a need for each of the courses and facilities suggested and it is hoped that the suggestions contained herein may stimulate the school authorities and other citizens of the community to undertake a comprehensive plan for the development of a vocational, practical arts and general adult education program for the youth and adults of Leflore County Mississippi.

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ESTIMATES OF PERSONNEL NEEDED, AND COST OF EQUIPMENT FOR VOCATIONAL, PRACTICAL ARTS, AND GENERAL ADULT EDUCATION FOR THE LEFLORE COUNTY SCHOOL DISTRICT

| Area | Personnel needed | Equipment cost |
|---|---|---|
| THE PRACTICAL ARTS | | |
| Grades K - 6 | | |
| 120 classrooms equipped with some hand tools, table and saw horses | Homeroom teachers | $ 12,000 |
| Grades 7 - 9 | | |
| Six general shops | 6 | 45,000 |
| Teachers' aides | 3 | |
| Grades 10 - 12 | | |
| Two practical arts shops | 2 | 40,000 |
| Teachers' aides | 2 | |
| Practical arts staff | | |
| Supervisor | 1 | |
| Materials laboratory coordinator | 1 | |
| Coordinators for K - 6 | 2 | |
| Clerk stenographer | 1 | |
| VOCATIONAL EDUCATION | | |
| Area Vocational-Technical School | | |
| Agriculture | 2 | 25,000 |
| Distributive occupations | 2 | 5,000 |
| Business occupations | 10 | 75,000 |
| Industrial-technical | 15 | 350,000 |
| Health | 2 | 5,000 |
| Home economics | 1 | 3,000 |
| Disadvantaged youth | 2 | 1,000 |
| General adult (full time equivalent) | 8 | 10,000 |
| Teachers' aides | 10 | |
| Area Vocational-Technical School staff | | |
| Director | 1 | |
| Assistant director (Public relations) | 1 | |
| MDTA supervisor | 1 | |
| Materials laboratory coordinator | 1 | |
| General adult education coordinator | 1 | |

# Industrial Arts Education In The Elementary Schools In Leflore County

By

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The following report is in answer to the two questions posed by Cooper W. Crain to Elizabeth E. Hunt following her visit to the Mississippi State University and the Leflore County School System, in connection with the industrial arts program being launched in grades K-6. The questions are:

"What is your impression of what we have done?"

What should we do in regard to Industrial Arts and Practical Arts in our schools?"

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In the move to develop a total industrial education program (K-12) in the Leflore County School System, young children will have a greater number of opportunities to become more fully functioning, competent human beings who will be a credit to themselves as well as their community. Your program of industrial education initiated in the one pilot school this year, kindergarten through sixth grade, will offer children the chance to develop in these specific ways: automomy, problem solving abilities, speaking, writing, and reading (using technical activities as a base), a feeling of self-confidence and self-worth, the ability to work with others, and an interest in learning and in school. In a school system which has no law requiring the attendance of its students, it is all the more important for the schools of that system to provide the kind of learning program which will lure the child to school. Having the opportunity to deal with a wide variety of tools in the classroom entices children to school. This

has been demonstrated over and over with children.

It appeared to this consultant that the groundwork laid for the development of this program has been most thoroughly and carefully throuht through. In my conference with Dr. E.F. Mitchell, Dr. Norman Wallace and Dr. George Vazak, it was quite obvious that much planning and discussion had gone on. Few pertinent questions regarding all of the facets of the program were left unraised, and for each question a thorough-going answer had been sought or was being sought. The launching of this program is being attacked by these men with an interest and competence that is to be commended.

Notable among their considerations, (in order to have the program be effective) was the concern for the preparation of the elementary classroom teacher who will be assuming the major aesponsibility for the implementation of the program with the children. They were particularly concerned that the teachers use the "design way of thinking" approach with the children. During my visit, the teachers in the pilot school (Leflore County School System) were introduced to the "design way of thinking". The problem introduced was "how to hold eight books on the top of a desk in such a manner as to be used conveniently". Although the definition developed was not a sophisticated one, these teachers demonstrated an understanding of the nature of the "design way of thinking", entered into the spirit of defining the problem, and appeared to be ready to translate criteria into reality. This approach sets the stage for helping children (who already have an openness in dealing with tools and materials) develop their own ideas and thus creative abilities. The value to be deprived from the problem solving approach can be summarized in this way: "It helps children develop their own creative problem solving

abilities. "Products", "tool skills" and "techniques for handling tools" develop more slowly and take a secondary role; but they will be achieved.

Another major consideration in launching an industrial arts or practical arts program is the type of provision made for children to have access to tools and materials. Once again, Drs. Mitchell, Wallace and Vazak have demonstrated commendable leadership in deciding that there would be the very best possible selection of tools (within the limitations set by the budget) to be placed in each classroom. This decision will provide for the children and teachers the greatest possible accessibility to the tools, This is necessary for this program to be of most benefit.

What should be done to further insure proper accessibility to all instructional items needed to conduct this program, is to be sure adequate funds are budgeted for the expendable supplies, repair, maintenance and replacement of tools. The funds budgeted for these items should come under two categories:

(1) An annual allocation for each school for a stockpile of commonly used materials. The materials should be accessible to each teacher in the school at all times.

(2) A petty cash fund to enable each teacher to meet unanticipated needs immediately.

The Leflore County Schools have employed an industrial arts consultant who will serve not only the pilot school but quite a number of other schools as well. Elementary classroom teachers who are beginning a program of this nature are going to need more help the first year than this one person under the present circumstances will be able to give. This may prove to be one of the most critical problems in launching the program. A full-time consultant in a pilot school the first year is not too much.

Moving as close as possible to providing that much consultant service is recommended.

One last recommendation has to do with the attitude I feel should prevail, both on the part of the administrator and the teachers. It is reflected in this statement: "Let's try this program out, discover what the problems are and see how we can solve them together". The kind of open communication this attitude sets in motion will go a long way toward the successful implementation of the program. If the teachers feel they have a vital role in solving the problems which will inevitably arise, they have a stake in the successful solutions to the problems and thus in the overall success of the program.

You should have the utmost confidence in Drs. Mitchell, Wallace and Vazak to guide the development of this program successfully.